

**VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY  
SOUTH CENTRAL REGIONAL OFFICE**

**FACT SHEET**  
**FOR PROPOSED PERMITTING ACTION**  
**UNDER 9 VAC 5 Chapter 80 Article 1 (TITLE V-CLEAN AIR ACT)**

**APPLICANT:**

VA-30867 AIRS ID 51-083-0046  
Virginia Electric & Power Company doing business as Dominion Generation, and Old  
Dominion Electric Cooperative (ODEC)  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, Virginia 23060

## **FACILITY LOCATION:**

Clover Power Station on the Roanoke River near Route 600, 2.5 miles north of Clover in Halifax County, Va.

UTM Coordinates are ZONE: 17 EASTING: 704.6 km NORTHING: 4082.6 km

**FACILITY DESCRIPTION:**

Clover Power Station manufactures electricity and is covered by Standard Industrial Classification (SIC) Code 4911. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The Clover Power Station operates two pulverized coal fired boilers nominally rated at 4,085 MMbtu/hr each for the purpose of generating electricity. Each boiler is equipped with a fabric filter for particulate emissions control, a wet limestone flue gas desulfurization system for SO<sub>2</sub> control and low NOx burners with overfire air to control NOx emissions. Equipment associated with the main boilers includes coal, limestone, lime, ash and fuel storage and handling systems. The facility also has one No. 2 fuel oil fired auxiliary boiler rated at 213.9 MMbtu/hr, which is used to provide steam during main boiler start-up, if needed, and two emergency diesel generators to provide electricity, if needed. An alternative operating scenario is to haul ash and/or FGD by-product directly to a marketer rather than to the landfill. A PSD permit dated September 4, 2002 covers the entire facility. This PSD permit was initially issued in April 29, 1991 and subsequently amended several times, the most recent amendment being September 4, 2002. The following conditions were streamlined out of the Title V permit because the requirements have been completed: Condition (of September 4, 2002 permit) #s I.18. \*\*\*, I.18.b., I.19.a., I.19.b., I.19.c. \*\*\*, I.26., I.27., I.37., I.38., I.40.a., I.40.b., I.40.c., and I.41.. Some conditions required stack testing and allowed for adjusting emission factors based on test results if need be, and the others required the facility to implement controls and requirements at another facility. The facility has a Title IV (acid rain) permit dated January 1, 1998 (expiring on December 31, 2002), which is incorporated by reference into this permit. A copy of the acid rain permit has been attached

to the Title V permit. At the request of the permittee, the state-only requirements are included as a separate section in this permit.

### **EMISSIONS SUMMARY:**

PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]		
CRITERIA POLLUTANTS	POTENTIAL EMISSIONS	1997 ACTUAL EMISSIONS
Particulate Matter (PM10)	646.6 tons/yr	45.7 tons/yr
Nitrogen Oxides (NOx)	10,751.9 tons/yr	7409.5 tons/yr
Sulfur Dioxide (SO <sub>2</sub> )	3578.5 tons/yr	1645.9 tons/yr
Carbon Monoxide (CO)	3591.6 tons/yr	227.9 tons/yr
Volatile Organic Compounds (VOC)	358.8 tons/yr	68.3 tons/yr
Lead (Pb)	15 tons/yr	9.5 tons/yr
HAZARDOUS AIR POLLUTANTS	POTENTIAL EMISSIONS	1997 ACTUAL EMISSIONS
Formaldehyde	14.4 lbs/day	3.3 tons/yr
Hydrogen Chloride	237.6 lbs/day	3.9 tons/yr
Hydrogen Fluoride	784.8 lbs/day	2.0 tons/yr

### **TITLE V PROGRAM APPLICABILITY BASIS:**

This facility has the potential to emit 646.6 tons per year of particulate matter, 10,751.9 tons per year of nitrogen oxides, 3578.5 tons per year of sulfur dioxide, 3591.6 tons per year of carbon monoxide, 358.8 tons per year of volatile organic compounds, 43.4 tons per year of hydrogen chloride, and 143.2 tons per year of hydrogen fluoride. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, and over 10 tons per year of a HAP, Clover Power Station is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 9 VAC 5 Chapter 80 Article 1. The main boilers are subject to NSPS, Subpart Da, and the auxiliary boiler is subject to Subpart Db.

### **Streamlined Requirements**

The requirements of 40 CFR part 60, subpart Da are less stringent than the emission limits included in the NSR permit. Therefore, streamlining is appropriate, and the Title V permit contains the NSR permit limits. Please see the attachment for a direct comparison of NSPS Da standards to the permit emission limits. The requirements of 40 CFR part 60, subpart Y are less stringent than the emission limits included in the NSR permit (10 % for coal handling), so the associated standard (20 % opacity) was streamlined. The requirements of 40 CFR part 60, subpart Y are less stringent than the emission limits included in the NSR permit (7 % for conveying transfer points), so the associated standard (5 % opacity) was streamlined.

**LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emission units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
- b. Any term or condition of any preconstruction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under ' 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under ' 112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either ' 504(b) or ' 114(a)(3) of the federal Clean Air Act or these regulations.
- f. Any standard or other requirement for consumer and commercial products under ' 183(e) of the federal Clean Air Act.
- g. Any standard or other requirement for tank vessels under ' 183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.

- j. With regard to temporary sources subject to 9 VAC 5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under § 129 of the Clean Air Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5 Chapter 80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the state but is not federally-enforceable is identified in the draft Title V permit as such.

**REQUEST FOR VARIANCES OR ALTERNATIVES:**

None

**PERIODIC MONITORING:**

For the main boilers, continuous emission monitors (CEMS) have been installed to measure and record the following: the opacity at each main boiler fabric filter outlet, the concentration of SO<sub>2</sub> at the inlet and outlet of each flue gas desulfurization system, NOx at each main boiler stack, and CO<sub>2</sub> or O<sub>2</sub> emitted from each main coal boiler. Other pollutants (ones without CEMs) are monitored by tracking fuel type and usage and applying the most recent emission factors in AP-42.

For the auxiliary boiler, CEMS shall be installed on the auxiliary boiler in accordance with the applicable New Source Performance Standard at 40 CFR 60, Subpart Db. They shall be maintained and calibrated in accordance with 40 CFR 60.13. The continuous monitoring data generated by the CEMS on the boiler shall be used to determine compliance with the emissions and opacity standards. All of the data capture, quality assurance provisions, and reporting requirements of 40 CFR 60, Subpart Db applies.

For the auxiliary boiler, the permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following: the name of the fuel supplier, the date on which the oil was received, the volume of distillate oil delivered in the shipment, and a statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil number 2, and the sulfur content of the oil. As an alternative to this requirement, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content restriction for the main boilers, emergency generators and auxiliary boiler.

Visual emission observations from the fabric filter exhaust stacks for the ash, coal, lime and limestone handling processes shall be conducted at least once per week. If visible emissions are observed, the permittee shall either take timely corrective action such that the fabric filter resumes normal operation and there are no visible emissions from the fabric filter exhaust stack, or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filter do not exceed five (5) percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed five (5) percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with visible emissions of 5 percent or less. Records shall be maintained, stating the date and time of each visible emissions check and whether visible emissions were observed, results of all VEEs, the observer's name and any required corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

**COMMENT PERIOD:**

The public notice appeared in the South Boston *The News & Record* on September 9, 2002.  
Beginning Date: September 9, 2002

Ending Date: October 9, 2002

All written comments should be addressed to the following individual and office:

Frank Bowman  
Senior Environmental Engineer  
Department of Environmental Quality  
South Central Regional Office  
7705 Timberlake Road  
Lynchburg, VA 24502  
Phone: (434) 582-5120 Fax: (434) 582-5125

**PROCEDURE FOR REQUESTING PUBLIC HEARING:**

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing to the above address and shall state the nature of the issues proposed to be raised in the hearing. The Director shall grant such a request for a hearing if he concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**South Central Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Dominion Resources, Inc.  
5000 Dominion Boulevard, Glen Allen, Virginia  
Permit No. SCRO30867

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Dominion Generation has applied for a minor modification to the Title V Operating Permit for its Clover facility. The Department has reviewed the application and has prepared a proposed Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_

Date: May 14, 2004

Air Permit Manager: \_\_\_\_\_

Date: May 14, 2004

Regional Director: \_\_\_\_\_

Date: May 14, 2004

## FACILITY INFORMATION

### Permittee

Dominion Resources, Inc.  
5000 Dominion Boulevard  
Glen Allen, VA 23060

### Facility

Clover Power Station  
2.5 miles north of Clover near Route 600 in Halifax County

AIRS ID No. 21-083-0046

## SOURCE DESCRIPTION

Dominion-Clover Power Station (Clover) manufactures electricity and is covered by Standard Industrial Code 4911. The power station operates two, 4,085 MM Btu/hr pulverized coal fired boilers with associated coal, limestone, lime, ash, and fuel storage handling systems. Clover is a major source of NO<sub>x</sub> emissions and the primary boilers are subject to the federal NOx Budget Trading Program. As of August 29, 2003, Clover received approval by DEQ for their continuous emission monitoring system strategy for calculating NOx emissions. As a result, the specific applicable requirements of the NOx budget program are incorporated into the Title V permit.

The regulation allows the use of the minor modification procedure to add these new regulatory requirements. The NOx Budget Trading program becomes effective May 31, 2004.

## COMPLIANCE STATUS

The last inspection conducted at the facility by the Virginia Department of Environmental Quality was September 30, 2003. Results from that inspection determined Clover “out of compliance”. However, on October 28, 2003, a follow-up enforcement report indicated the source’s status returned to “compliance”.

## EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units affected by the NO<sub>x</sub> trading program are two, 4,085 MMBtu/hr pulverized coal boilers (Unit ID ES-1, ES-2). These units are operated for the purpose of generating electricity. Both boilers are electrical generating units that were installed prior to 1999. As a result, the facility is required to measure and report the actual NO<sub>x</sub> emissions, and have planned to use an existing continuous emission monitoring system (CEMs). The CEM is set up to monitor NO<sub>x</sub>, CO<sub>2</sub>, and SO<sub>2</sub> emissions from each boiler. A continuous opacity monitor is also used to measure the opacity from each boiler’s exhaust stack.

## EMISSIONS INVENTORY

A copy of the 2002 Comprehensive Environmental Data System (CEDS) annual emission update was submitted in May of 2003.

## **EMISSION UNIT APPLICABLE REQUIREMENTS - [001, 002]**

### **Limitations**

The following Virginia Administrative Code and New Source Performance Standards have specific emission requirements have been determined to be applicable:

9 VAC 5-140-10 et.seq., NO<sub>X</sub> Budget Trading Program (permit requirements, compliance certification, allowance allocations and transfers, tracking, monitoring, reporting, opt-in process, and account representatives) See attached permit for source specific limitations.

### **NO<sub>X</sub> BUDGET TRADING PROGRAM REQUIREMENTS**

This section represents the NO<sub>X</sub> Budget Trading permit, as required by 9 VAC 5-140-200 A, for each NO<sub>X</sub> Budget source required to have a federally enforceable permit. A monitoring system has been installed for the NO<sub>X</sub> Budget unit (Unit ID ES-1 and ES-2) for monitoring NO<sub>X</sub> mass emission in accordance with Subpart H of 40 CFR Part 75. The monitoring system has been certified under the procedures of 40 CFR Part 75 before the required date of May 1, 2003. Recording and reporting of NO<sub>X</sub> emissions are required to be done in accordance with the requirements of 9 VAC 5 Chapter 140, 40 CFR Part 75, and 40 CFR Part 97.

### **STREAMLINED REQUIREMENTS**

None associated with this minor permit modification.

### **IN SIGNIFICANT EMISSION UNITS**

No additional insignificant emissions units identified.

### **PERMIT SHIELD & INAPPLICABLE REQUIREMENTS**

No inapplicable requirements have been identified.

### **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federally operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

### **COMPLIANCE PLAN**

N/A

### **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

### **PUBLIC PARTICIPATION**

The administrative corrections to this Title V permit as well as the inclusion of applicable NO<sub>X</sub> Budget conditions do not require a public participation period per 9 VAC 5-80-200 B.2., and 9 VAC 5-80-210 D.

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**South Central Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Dominion Resources, Inc.  
5000 Dominion Boulevard, Glen Allen, Virginia  
Permit No. SCRO30867

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Dominion Generation has applied for a significant modification to the Title V Operating Permit for its Clover facility. The Department has reviewed the application and has prepared a significant modification for Title V Operating Permit.

Engineer/Permit Contact:\_\_\_\_\_

Date: 11/2/06

Air Permit Manager:\_\_\_\_\_

Date: 11/2/06

Regional Director:\_\_\_\_\_

Date: 11/2/06

## FACILITY INFORMATION

### Permittee

Dominion Resources, Inc.  
5000 Dominion Boulevard  
Glen Allen, VA 23060

### Facility

P.O. Box 245  
Route 92  
Clover, Virginia 24534-0245

County-Plant Identification Number 51-083-0046

## SOURCE DESCRIPTION

NAICS Code - 221112 Dominion-Clover Power Station (Clover) manufactures electricity. The power station operates two, 4,085 MM Btu/hr pulverized coal fired boilers with associated coal, limestone, lime, ash, and fuel storage handling systems. Clover is a major source of NO<sub>x</sub>, CO and PM emissions. Their primary boilers are subject to the federal NOx Budget Trading Program.

Dominion hosts a synthetic fuel plant (Synfuel Plant) at Clover which commenced operation June 1, 2005. The synfuel process begins with raw coal conveyed from the coal storage area to a crusher (if needed), and then to the Synfuel Plant where the coal is mixed with water and latex binder to form briquettes. Emissions from the Synfuel Plant are particulate matter (PM, PM-10), and volatile organic carbons (VOCs). Particulate matter emissions from the Synfuel Plant are controlled by partial enclosure, dust collector, and wet suppression (where applicable). VOC emissions from the binder are uncontrolled. The inclusion of the facility's Synfuel Plant NSR permit dated October 7, 2004 as amended May 4, 2005 requires a significant modification to the current Title V permit.

## COMPLIANCE STATUS

A full compliance evaluation of this facility including a site visit was conducted on August 30, 2005. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

### **EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emission units at the Clover facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
ES-1	EP-1	Combustion Engineering pulverized coal boiler	4,085 MMBtu/hr (nominally)	fabric filter	BH-1	particulates	September 4, 2002
				wet limestone FGD	FGD-1	SO <sub>2</sub>	
				low NOx burners w/ overfire air	LNB-1	NOx	
ES-2	EP-2	Combustion Engineering pulverized coal boiler	4,085 MMBtu/hr (nominally)	fabric filter	BH-2	particulates	September 4, 2002
				wet limestone FGD	FGD-2	SO <sub>2</sub>	
				low NOx burners w/ overfire air	LNB-2	NOx	
ES-3	EP-3	Combustion Engineering No. 2 fuel oil fired boiler	213.9 (nominally)				September 4, 2002
<b>Coal and Ash Handling</b>							
ES-4 (a-e)	-	Coal handling, storage and crushing	varies	-	-	particulates	September 4, 2002
ES-4 (f-o)	EP-4 (f-o)	Coal handling, storage and crushing	varies	(10) Johnson March fabric filters	FF-4 (f-o)	particulates	September 4, 2002
ES-7 (a-c)	EP-7 (a-c)	Fly ash handling	varies	(2) Mikropul and (1) Zurn fabric filters	FF-7 (a-c)	particulates	September 4, 2002
<b>Lime and Limestone Handling</b>							
ES-5 (a)	-	Limestone storage and handling	varies	-	-	particulates	September 4, 2002
ES-5 (b-d)	EP-5 (b-d)	Limestone storage and handling	varies	(5) Johnson March fabric filters	FF-5 (b-d)	particulates	September 4, 2002
ES-6 (a-b)	EP-6 (a-b)	Lime storage and handling	varies		FF-6 (a-b)	particulates	September 4, 2002
<b>Emergency Generators</b>							
IS-1	IP-1	Emergency diesel generators, 2 units	14.66 MM Btu/hr (nominally)	-	-	-	September 4, 2002

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Statement of Basis- SynFuel Plant  
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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description <sup>†</sup>	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Synfuel Plant</b>							
FG-1		Motorized feed gate	500 ton/hr	PE, WS	-	particulates	May 4, 2005
FM-1, 2		Pug mixers	500 ton/hr	WS, FF	-	particulates	May 4, 2005
BR-1, 2		Briquetters (pellet mills)	250 ton/hr	WS, FF	-	particulates	May 4, 2005
C-3		Pellet mill transfer conveyor	500 ton/hr	PE, WS, FF	-	particulates	May 4, 2005
C-4 (a-b)		Pellet mill feed conveyors	250 ton/hr	WS, FF	-	particulates	May 4, 2005
C-5		Collection conveyor	500 ton/hr	PE, WS	-	particulates	May 4, 2005
<b>Coal Transfer Equipment</b>							
SB-1		Surge bin	500 ton/hr	PE, WS	-	particulates	May 4, 2005
CR-1		Coal crusher	500 ton/hr	FE	-	particulates	May 4, 2005
C-1, 2		Coal feed conveyors	500 ton/hr	PE, WS	-	particulates	May 4, 2005
CG1-CG3		Coal feed diversion gates	500 ton/hr	PE, WS	-	particulates	May 4, 2005
<b>Product Transfer Equipment</b>							
C6-C8		Product conveyors	500 ton/hr	PE, WS	-	particulates	May 4, 2005
PG-1,2		Product diversion gates	500 ton/hr	PE, WS	-	particulates	May 4, 2005
RS-1		Radial stacker	500 ton/hr	PE, WS	-	particulates	May 4, 2005
RH-1		Reclaim hopper	500 ton/hr	PE, WS	-	particulates	May 4, 2005
RC-1		Reclaim conveyor	500 ton/hr	PE	-	particulates	May 4, 2005
PP		Product stockpile	10,000 ton	PE, WS	-	particulates	May 4, 2005
<b>Binder Equipment</b>							
PT-1		Polymer tank	25,000 gal	none	-	VOC	May 4, 2005
PMT-1		Polymer mixing tank	2,000 gal	none	-	VOC	May 4, 2005
PT-3		Polymer storage tank	16,000 gal	none	-	VOC	May 4, 2005
WT-1		Polymer recycle storage tank	5,000 gal	none	-	VOC	May 4, 2005
WT-2		Water storage tank	5,000 gal	-	-		May 4, 2005
DT-1		Diesel fuel storage tank	1,000 gal	none	-	VOC	May 4, 2005

<sup>†</sup>PE = partial enclosure, WS = wet suppression, B = building, FF = fabric filter, FE = full enclosure

## EMISSIONS INVENTORY

The 2005 annual emission update is summarized in the following tables:

Emission Unit	2005 Criteria Pollutant Emission (ton/year)				
	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
ES-1	16.17	161.43	943.20	37.21	4737.30
ES-2	74.58	149.57	809.10	91.24	4654.10
ES-3	0.00	0.00	0.00	0.00	0.00
IS-1	0.01	0.06	0.00	0.00	0.24
Synfuel Plant	2.41			6.68	
Total	93.17	311.06	1,752.30	130.63	9391.64

Pollutant	2005 Hazardous Air Pollutant Emission (ton/year)
HCl	5.97
HF	3.05
Pb	0.07
Styrene	0.33
Vinyl Acetate (VA)	1.82

## SIGNIFICANT PERMIT MODIFICATION INFORMATION

The inclusion of Clover's NSR permit to construct and operate a Synfuel Plant into their existing Title V permit activated the significant permit modification process. The NSR permit is dated May 4, 2005. The Title V permit modification application was received on May 18, 2006.

## EMISSION UNIT APPLICABLE REQUIREMENTS REVISIONS

The following requirements are taken from the NSR permit dated 5/4/2005.

### Applicable Requirements

The limits established in the Synfuel Plant's NSR permit include: emission control, monitoring device requirement, visible emission limits, recordkeeping, initial notification and general requirements. The visible

emission limit per 9 VAC 5-50-80 is a requirement for all new and modified sources. BACT for the synfuel plant, the crusher and conveyor transfer process was determined to be fabric filter, or full/partial enclosure with wet suppression (or equivalent) for 99% control efficiency. Visible emissions are not to exceed 10% opacity (per Method 9) for crushing and stockpile operations, 5% opacity for the Synfuel Plant exhaust stack, and 0% opacity from all fugitive emission sources (Synfuel Plant enclosures).

#### Periodic Monitoring

The NSR permit does not establish periodic visible emissions monitoring. For the Synfuel Plant, periodic monitoring was determined to be the same as the plant's coal handling operations. At least once per week, the synfuel plant fabric filter stack (DCS-1) must be observed for visible emissions. If visible emissions are observed, then the facility shall take timely corrective action so that the fabric filter resumes normal operation with no visible emissions, or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60 Appendix A, Method 9 to assure visible emissions from the fabric filter do not exceed 5% opacity. 40 CFR 60 Subpart Y, "Standards of Performance for Coal Preparation Plants" require an initial visible emission evaluation per Method 9 for the crusher operation. This initial monitoring requirement has been satisfied and is not included in the Title V permit.

#### Recordkeeping

Condition #17 of the NSR permit establishes recordkeeping requirements for each limitation contained in the permit. These records include production consumption/throughput, emission calculations, VOC content documentation, scheduled and unscheduled maintenance, operator training and visible emission evaluations. All records must be maintained on site for a period of 5 years and be made available upon request. This requirement is included in the Title V permit.

#### Reporting

The permittee shall comply with the reporting requirements established in accordance with Sections III, IV and XI of the Title V permit.

Initial notifications included in the NSR permit as Condition 19 have been satisfied. This condition was not included in the Title V permit.

#### Testing

Condition #18 of the NSR permit establishes the requirement that the equipment be constructed to allow for emissions testing with reasonable notice. This condition is included in the Title V permit.

### **APPLICABLE NSPS REQUIREMENT**

Clover's coal crusher operation is subject to NSPS Subpart Y, "Standards of Performance for Coal Preparation Plants". This subpart has been included into the revised Title V.

### **COMPLIANCE ASSURANCE MONITORING (CAM)**

Clover's initial Title V permit was deemed administratively complete by April 20, 1998. Subsequently, they are required to comply with CAM: upon permit renewal for all "large units"; or a significant revision is being sought for a large unit; or the permit is reopened by DEQ or EPA for cause (affecting large units). The Synfuel Plant's dust handling and VOC emissions do not exceed major source thresholds (MST) after permitting. CAM is not applicable for this significant revision. Clover's Title V renewal application should

be submitted no later than June 30, 2007.

#### **SUPPLEMENT ENVIRONMENTAL PROJECT SCHEDULE**

There is no Supplemental Environmental Project (SEP) associated with this facility.

#### **STREAMLINE REQUIREMENTS**

None associated with this significant permit modification.

#### **IN SIGNIFICANT EMISSION UNITS**

No additional insignificant emissions units are identified.

#### **PERMIT SHIELD & INAPPLICABLE REQUIREMENTS**

No inapplicable requirements have been identified.

#### **GENERAL CONDITIONS**

The General Conditions have been updated to comply with the current boilerplate.

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

#### **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

#### **PUBLIC PARTICIPATION**

The public notice for this Draft significant modification to the Title V permit appeared in the South Boston *The News & Record* on August 17, 2006 and ended on September 16, 2006.

All written comments should be addressed to the following individual and office:

Anita Walthall  
Virginia Department of Environmental Quality  
South Central Regional Office  
7705 Timberlake Road  
Lynchburg, VA 24502  
Phone: (434) 582-6238  
Fax: (434) 582-5125  
alwalthall@deq.virginia.gov